



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
30.12.1998 Bulletin 1998/53

(51) Int Cl.<sup>6</sup>: **G10K 11/178**

(43) Date of publication A2:  
14.05.1997 Bulletin 1997/20

(21) Application number: 96308088.2

(22) Date of filing: 07.11.1996

(84) Designated Contracting States:  
**DE FR GB IT SE**

(30) Priority: 07.11.1995 US 553186

(71) Applicants:

- **DIGISONIX, Inc.**  
Middleton, Wisconsin 53562-2543 (US)
- **LORD CORPORATION**  
Erie Pennsylvania 16514-0038 (US)

(72) Inventors:

- Steenhagen, Shawn K.  
Madison, Wisconsin 53711 (US)
- Southward, Steve C.  
Cary, North Carolina 27511 (US)
- Delfosse, Kent F.  
Madison, Wisconsin 53711 (US)

(74) Representative: **Burke, Steven David et al**  
**R.G.C. Jenkins & Co.**  
**26 Caxton Street**  
**London SW1H 0RJ (GB)**

**(54) Frequency selective active adaptive control system**

(57) An active adaptive control system and method has frequency dependent filtering with a transfer characteristic which is a function of a frequency dependent shaped power limitation characteristic maximizing usage of available output transducer authority. Band separation is provided for different tones. Power limit partitioning is provided for effectively distributing power between correction tones to maximize model performance.

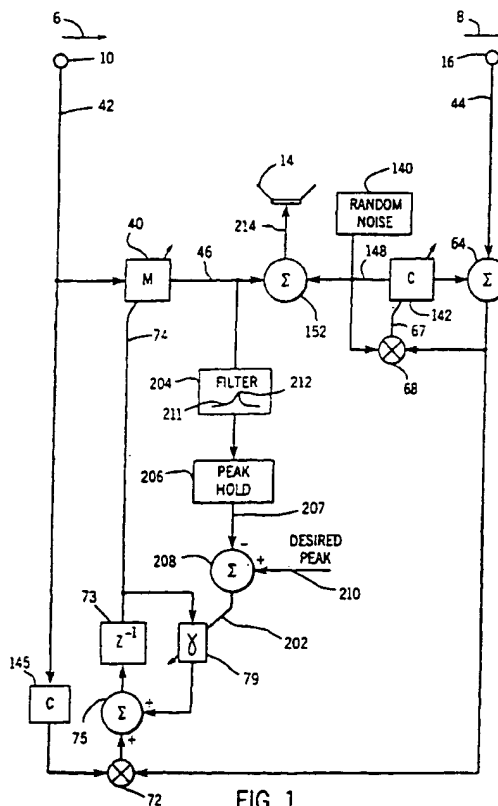


FIG. 1

**BEST AVAILABLE COPY**



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number  
EP 96 30 8088

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	EP 0 581 565 A (NELSON IND INC) 2 February 1994 * abstract * * column 1, line 38 - column 2, line 19 * * column 3, line 40 - column 4, line 5 * * figure 2 *	1,10,73	G10K11/178
A	EP 0 568 129 A (GEN MOTORS CORP) 3 November 1993 * abstract * * page 4, line 2 - line 22 * * page 13, line 37 - line 53 *	1,10,73	
A,D	US 4 677 676 A (ERIKSSON LARRY J) 30 June 1987 * the whole document *		
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			G10K
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 6 November 1998	Examiner Castagné, O
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03/92 (P4/C01)

BEST AVAILABLE COPY